

Appl. No. 10/562,565
Amendment dated February 28, 2008
Reply to Office Action of September 28, 2007

REMARKS

In the September 28, 2007 Office Action, claims 1-6, 10, 14-18 and 20-24 stand rejected in view of prior art, while claims 7-9, 11-13 and 19 were indicated as containing allowable subject matter. Applicants wish to thank the Examiner for this indication of allowable subject matter and the thorough examination of this application. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the September 28, 2007 Office Action, Applicants have amended claims 1, 2, 12, 15, 20 and 22 as indicated above. Thus, claims 1-24 are pending, with claims 1 and 20 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

Rejections - 35 U.S.C. § 103

In paragraphs 1-20 of the Office Action, claims 1-6, 10, 14-18 and 20-24 stand rejected under 35 U.S.C. §103(a). Claims 1-4, 10, 14-18, 20-22 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,062,834 (Masumoto) in view of U.S. Patent No. 5,720,602 (Hill et al.). Claims 5 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Masumoto and Hill et al. as applied to claim 5, and further in view of U.S. Patent No. 4,055,199 (Herman). Claim 23 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Masumoto and Hill et al. as applied to claim 22, and further in view of U.S. Patent No. 5,544,896 (Draskovich). In response, Applicants have amended independent claims 1 and 20 to more clearly define the present invention over the prior art of record.

More specifically, independent claims 1 and 20 now require, *inter alia*, a compression mechanism including a compression chamber configured to compress gas introduced from the intake pipe, a drive shaft movable about a rotation axis to operate the compression mechanism and an intake passage extending in a radial direction relative to the rotation axis, the intake passage having one end that opens at the compression chamber and an opposite end that opens in an outer peripheral face of the compression mechanism to face a terminal

end of the intake pipe, both of the ends of the intake passage being at least partially aligned with the compression chamber and the terminal end of the intake pipe as viewed in the radial direction along the intake passage; and an elastic support member supporting the compression mechanism and the motor as an integrated unit within the sealed container for movement together with respect to the sealed container. Clearly this arrangement is **not** disclosed or suggested by the Masumoto patent, the Hill et al. patent, the Herman patent and/or the Draskovich patent, whether taken alone or in combination.

Specifically, in the Masumoto patent, the so-called intake pipe 16 is actually a discharge pipe **not** an intake pipe. See column 4, lines 59-62. In any event, the Matsumoto patent fails to disclose or suggest a radially extending intake passage as claimed, i.e., with one end that opens at the compression chamber and an opposite end that opens in an outer peripheral face of the compression mechanism to face a terminal end of the intake pipe, both of the ends of the intake passage being at least partially aligned with the compression chamber and the terminal end of the intake pipe as viewed in the radial direction along the intake passage. Rather, in the Matsumoto patent, gas/fluid is axially introduced and axially exits the compression chamber, and the so-called intake passage (4c) is offset from the compression mechanism as viewed radially along the so-called intake passage (4c). Furthermore, in the Matsumoto patent, the motor (8) is fixed to the container (9). Thus, at best, the so-called compression mechanism is supported by the so-called elastic plate (10) to move relative to the motor (8) and the container (9), **not** to move together with the motor as an integrated unit as now claimed.

The remaining references fail to account for the deficiencies of the Matsumoto patent with respect to independent claims 1 and 20. Specifically, the Hill et al. patent, the Herman patent and the Draskovich patent all fail to disclose or suggest an intake passage and/or an elastic member supporting a motor and compression mechanism as an integrated unit, as now claimed. The Herman patent and the Draskovich patent do not disclose compressors whatsoever. While the Hill et al. patent discloses a compressor with an suction port 52, this reference fails to disclose an intake passage, as now claimed. Accordingly, even if these references were combined as suggested in the Office Action, a hypothetical device created by the hypothetical combination(s) set forth in the Office Action would not include all of the features of independent claims 1 and 20, as now amended.

In other words, the present invention relates to a compressor that discharges compressed gas into a sealed container (10) configured with a high pressure dome-shaped. The compression mechanism (20) and the motor (30) are integrated and elastically supported within the sealed container by an elastic support member, as set forth in independent claims 1 and 20. In the present invention, the sealed container is (mechanically – vibrationally) insulated from the compression mechanism and the motor due to this arrangement. Also, a gap between an intake passage and an intake pipe is sealed so as not to transfer any vibration from the compression mechanism and the motor to the container.

On the other hand, in the Masumoto patent, the motor (8) is fixed to the closed vessel (9) by the member of the bottom part of the motor as mentioned above, and the fixed scroll (1) is fixed to the closed vessel (9) through the frame 3. Thus, the Masumoto patent is different from the present invention in that the motor (8) and the fixed scroll (1) are separately supported. Moreover, in the Masumoto patent, the discharge port (1c) is axially extending from the innermost compression space (6), the high pressure space is in the muffler (5), the *discharge* hole (4c) and the *discharge* pipe (16) are connected in sequence. Due to this arrangement in the Matsumoto patent, the pressure drop must be large. On the other hand, in the present invention, the intake passage (40) is disposed straight to the radial direction (i.e., at least partially aligned as viewed in the radial direction) from the compression chamber (22) and therefore, any pressure drop can be reduced. Based on this acknowledgement, the sealing mechanism (S) is provided for being communicated with the intake passage and the intake pipe and absorbing the vibration of the compression mechanism.

Accordingly, based on the above amendments and arguments, withdrawal of the rejections of independent claims 1 and 20 as well as their respective dependent claims 2-6, 10, 14-18 and 21-24 is respectfully requested.

Allowable Subject Matter

In paragraph 21 of the Office Action, claims 7-9, 11-13 and 19 were indicated as containing allowable subject matter. Applicants wish to thank the Examiner for this indication of allowable subject matter and the thorough examination of this application. In response, Applicants have not amended these claims to place them in independent form.

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However, these claims are believed to be allowable because claims 1 and 20 are believed to be allowable as explained above.

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In view of the foregoing amendment and comments, Applicants respectfully assert that claims 1-24 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested. If there are any questions about this Amendment, please feel free to contact the undersigned.

Respectfully submitted,

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